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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,948	04/16/2004	Craig J. Reuscher	994-1002.DIV	1607
7590 Lloyd L. Zickert Suite 1100 79 West Monroe Street Chicago, IL 60603			EXAMINER PARVINI, PEGAH	
			ART UNIT 1755	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/16/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/826,948

Applicant(s)

REUSCHER, CRAIG J.

Examiner

Pegah Parvini

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 1 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 10-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

Any rejection and/or objections, made in the previous Office Action, and not repeated below, are hereby withdrawn.

#### ***Claim Rejections - 35 USC § 103***

1. The rejection of claims 1, 3-4 under 35 U.S.C. § 103 as being anticipated and obvious over US Patent No. 5,908,501 to Pucillo as set forth in the first office action mailed on October 31, 2006 stands.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### ***Response to Amendment***

2. Applicants' amendment to claim 9, the deletion of section "SiO<sub>2</sub>:Li<sub>2</sub> of typically 10.0" and adding the section of "10 SiO<sub>2</sub>:Li<sub>2</sub>" in page 4, filed on October 31, 2006 is acknowledged. As such, the 35 U.S.C 112, second paragraph rejection to claim 9 in the First Office Action is withdrawn.

#### ***Response to Arguments***

3. Applicant's arguments, see page 2, paragraphs 1 and 2, filed January 31, 2007, with respect to indefiniteness of the ratios of Na<sub>2</sub>O or K<sub>2</sub>O to SiO<sub>2</sub> or vice versa have

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been fully considered and are persuasive. The 35 U.S.C. § 112, second paragraph rejection of claims 1-9 has been withdrawn.

4. Applicant's arguments filed January 31, 2007, with respect to 35 U.S.C § 103 rejections have been fully considered but they are not persuasive. Therefore, the grounds of 35 U.S.C. § 103(a) rejection for claims 1-9 as indicated in the first Office Action stand.

5. The applicants argue that the ratios indicated in the reference erroneously shows the sodium silicate and potassium silicate ratios in a non-conventional way. The applicants, also, argue that the coating composition can only be achieved by the blend of the three very specific silicates claimed in claims 1 and 5.

The examiner respectfully submits that the final product composition obtained by the reference, Pucillo, contains amounts of silicate, water, sodium and potassium which are within the ranges in claim 1 once the calculations to obtain the final composition based on sodium, potassium, silicate and water have been performed on claim 1 product based on the three ratios of sodium and potassium silicate used. Pucillo discloses that the coating composition essentially consists of about 25 to 50, preferably about 30 to 40 and more preferably about 35 to 40 weight percent potassium silicate, sodium silicate, or mixtures thereof (column 3, lines 25-32). Using the limitations in claim 1, considering a mixture of sodium silicate and potassium silicate, as indicated in

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the two attached excel spreadsheets, taking 40, 40, and 20 parts of 2 wt ratio sodium silicate, 3.22 wt ratio sodium silicate, and 2.5 wt ratio potassium silicate in a 100g basis with 10 parts of water to obtain a total of 110 parts, the result indicates that the total amount of sodium silicate and potassium silicate in the final aqueous solution obtained is about 34.5% which is above the about 25 to 50 weight percent of mixture of sodium silicate and potassium silicate disclosed by Pucillo. In addition, taking 5, 5, and 90 parts of 2 wt ratio sodium silicate, 3.22 wt ratio sodium silicate, and 2.5 wt ratio potassium silicate in a 100g basis with 10 parts of water to obtain a total of 110 parts, the result indicates that the total amount of sodium silicate and potassium silicate in the final aqueous solution obtained is about 27.4% which is above the about 25 to 50 weight percent of mixture of sodium silicate and potassium silicate again disclosed by Pucillo.

Examiner respectfully submits that Pucillo disclose a general embodiment of the amount of the components in the final composition in column 3, lines 25-32.

Regarding other components in the coating composition disclosed by Pucillo, it is noted that claims 1 and 5 read "comprising".

Regarding claims 1-9, the examiner had intended the rejection based on 35 U.S.C. 103(a) because of overlapping ranges; the rejection was proper.

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**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE –MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pegah Parvini whose telephone number is 571-272-2639. The examiner can normally be reached on Monday to Friday 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PP

  
**J.A. LORENZO**  
**SUPERVISORY PATENT EXAMINER**